Stephanie van Ryzin

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| **3R’s Poster Project** | | |
| **Teacher: Stephanie van Ryzin** | | **SUBJECT: Urban Farming (Alternate Assessment)** |
| **SCHOOL: Thomas Edison CTE High School** | | **GRADE: 10-12th** |
| **UNIT** | Waste & Recycling | |
| **ESSENTIAL QUESTION** | Why is reducing, reusing and recycling our waste so important? | |
| **LINK(S) TO PRIOR KNOWLEDGE** | Students will have already learned about natural resources and the difference between renewable and nonrenewable resources. Students will have learned that if we don’t recycle, most products will end up sitting in a landfill. | |
| **BACKGROUND INFORMATION** | Recycling is one of the best ways for you to have a positive impact on the world in which we live. Recycling is important to both the natural environment and us. We must act fast as the amount of waste we create is increasing all the time. Recycling reduces the need for raw materials so that the rainforests can be preserved. Huge amounts of energy are used when making products from raw materials. Recycling requires much less energy and therefore helps to preserve natural resources. | |
| **CCLS: Common Core Learning Standards** | **[CCSS.ELA-Literacy.W.9-10.2](http://www.corestandards.org/ELA-Literacy/W/9-10/2/)**   * Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. | |
| **SUBJECT AREA STANDARDS**  **Next Generation Science Standards** | [**ESS3.C: Human Impacts on Earth Systems**](http://www.nap.edu/openbook.php?record_id=13165&page=194)   * [The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources.](http://www.nap.edu/openbook.php?record_id=13165&page=194)   **HS-LS2-7: Interdependent Relationships in Ecosystems**   * Design, evaluate and refine a solution for reducing the impacts of human activities on the environment and biodiversity. | |
| **INSTRUCTIONAL GOALS** | * Students will perform research on recyclable items * Students will be able to design and construct a poster * Students will be able to explain why recycling is important | |
| **TECHNOLOGY** | Students will watch the video “The Story of Stuff” before starting the project. | |
| **MATERIALS** | Project description, research sheets, graphic organizer, poster paper, pencils, markers, colored pencils, cut out images of items, colored paper, scissors, glue. | |

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| **Day 1: Research** | |
| **AIM** | How can we learn more about recyclable items? |
| **DO NOW**  **5min** | Students will write their answers to the following question in their notebook:  What are the last five items you threw away? Did you recycle any of them? Why or why not?  Teacher will then call on students to share out their answers to the Do Now. |
| **MINI LESSON**  **10min** | **Project Introduction – *Why are the 3R’s Important?***  Teacher will introduce the project and call on students to read through the project description and requirements.  ***Task****: In your groups you will create a poster that helps people to understand the importance of the 3R’s. You will research one item that can be reduced, reused or recycled, and create a poster to educate people about this. Item suggestions: plastic, glass, paper and aluminum cans.*  ***Requirements:*** *Title, name of your item, image of your item, one important fact about your item, one way your item can be reduced, reused or recycled, how long your item will sit in a landfill for.*  Teacher will address any questions students have before moving on. |
| **GROUP ACTIVITY**  **20-25min** | **Group Research & Design:** Students will use teacher made materials (information sheets) on their item of choice. Students will fill in a graphic organizer with the information from the research.  Once students have finished their research, each group will create a draft of their poster and brainstorm design ideas.  Teacher will circulate and help students as needed. |
| **SUMMARY**  **5min** | **Wrap Up:** Teacher will call the class together and have each group present to the class a short summary (1min) of what they learned about their item today. |

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| **Day 2: Design** | |
| **AIM** | How can we design a poster to teach people about the importance of reducing, reusing and recycling? |
| **DO NOW**  **5-8min** | Students will sit in their groups and take out their graphic organizers and project materials from the previous lesson. Teacher will circulate and conference with each group before giving them permission to work on their final posters. |
| **GROUP ACTIVITY**  **30min** | **Poster Project Construction:** Teacher will instruct students to elect one group member to come to the resource table and gather the required materials for their posters. Students will be able to choose from a variety of materials to construct their posters.  Teacher will circulate and help groups as needed. |
| **SUMMARY**  **5min** | **Exit Ticket:** Students will write a short reflection (2-3 sentences) in their notebooks answering the following question: *How did you help contribute to your groups project today?* |

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| **Day 3: Gallery Walk** | |
| **AIM** | How can we teach each other about recycling? |
| **DO NOW**  **5min** | Students will take out their posters and hang them around the room. Teacher will pass out the Gallery Walk Graphic Organizer and explain the directions. |
| **GROUP ACTIVITY**  **25-30min** | **Gallery Walk:** Students will walk around the classroom and observe other group’s posters. Students will fill out a graphic organizer where they have to record the group member names, poster title, item name, one thing they learned from the poster and one thing they like about the poster.  Teacher will circulate and help students as needed. |
| **SUMMARY**  **5-10min** | **Reflection:** Teacher will call the class together and ask students to share some of the things they learned from the posters and what they liked about other groups posters. Teacher will ask students to independently write answers to the essential question: *Why is reducing, reusing and recycling our waste so important?*  Teacher will have students share out and collect students responses at the end of the period. |
| **ASSESSMENT OF THE LESSON** | **Project Rubric:** Teacher will use a rubric to grade students on the different components of the lesson. (see below) |
| **DIFFERENTIAION:** Students will be grouped heterogeneously in mixed ability. Students will use a graphic organizer and guided checklist to make sure they complete each part of the project. Hands-on activity for kinesthetic learners. Students will have the option of completing their reflection for homework if they need extra time. | |

Project Rubric – How will my poster be graded?

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|  | 5- Excellent | 4- Good | 3- Acceptable | 2- Poor |
| Required Elements | Poster has all 6 of the required elements! | Poster has most (5) of the required elements. | Poster has some (3-4) of the required elements. | Poster has only a few (1-2) of the required element. |
| Accuracy of information | All information is correct and accurate. | Most information is correct and accurate. | Some information may be not correct and accurate. | Most information is incorrect and not accurate. |
| Creativity and organization | Poster is creative and easy to read. | Poster is somewhat creative and easy to read. | Poster is not very creative and may be difficult to read. | Poster is not creative and very difficult to read. |
| Use of Class time | All group members were on task each day of the project. | Most group members were on task each day of the project. | Some group members were not on task some days of the project. | Group members were off task each day of the project. |

Final Grade = \_\_\_\_/ 20